Date: Sun, 7 Feb 93 10:09:22 PST

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #181

To: Info-Hams

Info-Hams Digest Sun, 7 Feb 93 Volume 93 : Issue 181

Today's Topics:

Addtional feature on Yaesu FT-5100 found: adjustable timeout

Cameroon contacts
New Products

No Code

NoCode Licences (2 msgs)

OPINIONS: Yeasu FT-530, and other dual band HTs (2 msgs)

Proposition question on DPLs

Radio Frequency interference and My Cat

RF exposure

Some FT-530 Questions... USA Reciprocal licensing

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 7 Feb 93 17:01:32 GMT

From: ogicse!uwm.edu!spool.mu.edu!howland.reston.ans.net!usenet.ins.cwru.edu!

neoucom.edu!wtm@network.UCSD.EDU

Subject: Addtional feature on Yaesu FT-5100 found: adjustable timeout

To: info-hams@ucsd.edu

I discovered by accidental application of fat finger: if the high/low button is held while turning on power, that transmitter time-out may be set. If you do this, the left VFO display will show some number between 00 and 60. The factory default appears to be 15. The number can be changed by rotating the frequency knob.

I tried an experiment, setting the number to 01. I keyed up into a dummy load. After one minute, the transmitter shut off with, "Err" displayed in the VFO.

I'll leave it up to you to decide a use for this feature. If you're an O.F. from HF that can't seem to break the habbit of timing out repeaters, you could set your own time-out.

What would be neat would be to have a way to adjust RF power level in a similar fashion, but examining the schematic diagram, it looks like only two power levels are possible.

By the way, the technical manual for the 5100 is finally available. The information is pretty spare. No additional operating notes or hidden secrets are revealed. It is worthwile for the alignment notes and complete parts list. Call the number in your owners manual to order.

73, Bill

- -

Bill Mayhew NEOUCOM Computer Services Department Rootstown, OH 44272-9995 USA phone: 216-325-2511 wtm@uhura.neoucom.edu (140.220.1.1) 146.580: N8WED

Date: 7 Feb 93 15:44:56 GMT

From: ogicse!uwm.edu!rpi!gatech!concert!rock!shsnow@network.UCSD.EDU

Subject: Cameroon contacts
To: info-hams@ucsd.edu

I am trying to make contact with a nun, Sister Patricia Beyrau, in the Republic of Cameroon. She works in the northern mountains, but once a month visits the Mission Catholique in Mijidivin (sp?). I have found no Internet access to the country at all. Closest I have found is Zimbabwe and Nigeria.

If you know of a radio path into the country, I'd like to try sending a message to her. Family has important news for her but is unable to reach her with *snail* mail.

Thanks for your responses and any effort expended!

Steve Snow

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Date: 4 Feb 93 21:50:45 GMT
From: olivea!charnel!rat!usc!sol.ctr.columbia.edu!The-Star.honeywell.com!umn.edu!
kksys.com!edgar!brainiac!moron!pillock!stevej@ames.arpa
Subject: New Products
To: info-hams@ucsd.edu
brian@amdcl2.amd.com (Brian McMinn, N5PSS) writes:
> In the Feb 93 QST, I saw the following new products that looked
> interesting. I have no connections with either, but thought they were
> unusual enough to call attention to:
> Azden AX-21A, AZ-11, and AZ-61
        6m and 10m HTs! (FM only) Azden is now in the HT business and
>
        their first three offerings are HT's for 2m, 6m and 10m. I've
>
        seen a lot of net requests over the years for a 10m HT. I
>
>
        called for a price and the 2m is $330, 10m or 6m is $320.
>
> j-Com MX series
>
>
        HT's for 80m through 6m! (CW and SSB only) weight: 20oz incl.
        batteries. 2 Watts, single band $350
>
> --Brian, N5PSS
> --brian@amd.com
Just what we need another 2m HT. To bad Azden didn't make those new HT''s
all modes.....
Steve KAOVYB
Date: Sun, 7 Feb 93 04:01:04 GMT
From: pacbell.com!att-out!walter!porthos!dancer!whs70@ames.arpa
Subject: No Code
To: info-hams@ucsd.edu
In article <199302052158.AA27306@tilde.csc.ti.com> dube@cpdvax.CSc.ti.COM writes:
>Duane, WB90MC writes:
    One of my major arguments in favor of no-code was that in the face
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>>of increasing pressure on our spectrum allocations, we had better expand our >>hobby in terms of sheer numbers of people. Congresscritters understand >>two things: cash and re-election. If you got enough people in your hobby >>to wield lots of votes, you stand a better chance of having some influence. >>And influence is what will keep spectrum, NOT a bunch of purists keeping >>people OUT of the hobby.

>There's no basis for assuming that numbers of Hams will protect spectrum. What >will keep spectrum is numbers of Hams *using* spectrum. Loading up 2-meters >with thousands of new Hams each year won't keep us from losing 23cm or 33 cm >if some commercial interest can demonstrate to FCC that it is not being used.

>While I agree that numerous letters to your congressmen will get their >attention, it does not follow that they would reverse a FCC decision to >take spectrum.

The point is not to reverse an FCC decision, it is to influence congresscritters enough that THEY will influence the FCC BEFORE we lose spectrum.

Yes, if all the new hams only partake of 2m, we are not doing any better, but hopefully the aggragate of new hams will help foster many to increase the utilization of the other bands.

>Now if there were some way to require more people to move to 1.25, .33 and >.23 (and above), we would then be able to demonstrate that Hams really do >need that space. Unfortunately, I don't see mobs of people voluntarily >going up there for at least these two reasons:

- > (1) Equipment is expensive to buy, and
- > (2) Equipment is too complex for the mobs to build themselves.

But if the pool of possible equipment purchasers increases, the cost of equipment may decrease to a more affordable level.

Same as above, if crowding on 2m is a problem it will encourage some to explore/pioneer the other bands.

Is any of this absolutely going to happen? Who knows, but you can be sure that if the ham population doesn't increase, the prospect of losing frequency spectrum is far more probable than if we have an additionl several hundred 1000 new hams in our ranks.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's. ______ Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.) Morristown, NJ email via UUCP bcr!cc!whs70 201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com _____ Date: Fri, 05 Feb 93 21:04:43 GMT From: valinor.mythical.com!n5ial!jim@uunet.uu.net Subject: NoCode Licences To: info-hams@ucsd.edu I just wrote: > how about over a cup of coffee, breakfast, etc.? in several areas I've > lived in, there were groups of friends on the local repeater(s) who > would meet for coffee, breakfast, etc., every Saturday (or Sunday, or > whatever). that post hasn't left this machine yet (I'm UUCP-based, and haven't run uucico yet since then), and a few minutes ago, guess what..... I just got invited to the every 1st/3rd Saturday morning breakfast. strange coincidence, no? --jim #include <std disclaimer.h> 73 DE N5IAL (/4) ______ ______ E-mail me for information about KAMterm (host mode for Kantronics TNCs). -----Date: Fri, 05 Feb 93 16:59:27 GMT From: valinor.mythical.com!n5ial!jim@uunet.uu.net Subject: NoCode Licences To: info-hams@ucsd.edu

In article <VBREAULT.93Feb1110430@rinhp750.gmr.com>
vbreault@rinhp750.gmr.com writes:

> That is: without the benefit

> of a "club meeting" type atmosphere, just how should one go about telling

> the new folks that their gaffe is showing?

how about over a cup of coffee, breakfast, etc.? in several areas I've lived in, there were groups of friends on the local repeater(s) who would meet for coffee, breakfast, etc., every Saturday (or Sunday, or whatever).

why not invite the new folks to these get-togethers (even if they haven't made any operating mistakes)? I know I always appreciated the invitation, even when I wasn't new anymore (perhaps new to the area, though). it was a chance to meet the folks face to face, and make new friends. and if, by chance, you happen to find an opportunity to invite the same folks to a club meeting, great!

how about inviting the new folks over to see your shack?

while they're there, you could casually mention their operating mistakes, and give them friendly guidance. just be sure they know it is just that --- friendly guidance, and don't give them the impression that you're chewing them out, or you might just get tuned out, but either way, the friendly guidance (aka constructive criticism) is far more likely to be taken well and listened to.

during any of the above types of visits, you might also offer your assistance in other areas. once, when I was invited over to see the shack of one of the hams in San Antonio who lived a couple of blocks from where I lived at the time, I got all kinds of help with my first HF antenna, including some old coax, wire, and insulators he had laying around. he didn't build the antenna, but he sure got me off to a good start!

I've had other hams see to it that I had other essentials....one ``sold'' me my first HF rig for 25 cents, another donated a copy of both the Handbook and the Antenna Book (the issues were about 4 years old at the time).

there are an endless number of ways that we can welcome new folks to the hobby (or not-so-new folks to the area --- that's where I'm at right now...I went to my first local club meeting last night). you just have to find something that fits in with their needs, and you're off. you'll find you make some good friends that way, too. :-)

I personally believe that *ALL* of this fits into the topic at hand. it's all about welcoming the new hams in, and a part of that is guiding them in their operating skills. we can each help them out in our own way. the important thing is that we do just that.

- -

#include <std_disclaimer.h>

73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

Date: Sun, 7 Feb 1993 01:04:03 GMT

From: gumby!destroyer!cs.ubc.ca!fornax!ballanty@yale.arpa Subject: OPINIONS: Yeasu FT-530, and other dual band HTs

To: info-hams@ucsd.edu

Well, the subject line says it all. I'm looking at dual-band HT's and currently leaning towards the FT-530. I've also been looking at the Kenwood TH-78, Alinco DJ-580, and the Icom IC-W2A. What I would like to know is: is the 530 in the same league as the others on my list (same kinds of features)? Are these the only HTs I should be considering, are there any others that you would recommend?

Any other sage advise you would like to pass on would be appreciated---This is my first radio.

Thanks,

Rob

Date: 7 Feb 93 17:32:51 GMT

From: ogicse!uwm.edu!spool.mu.edu!howland.reston.ans.net!usenet.ins.cwru.edu!

neoucom.edu!wtm@network.UCSD.EDU

Subject: OPINIONS: Yeasu FT-530, and other dual band HTs

To: info-hams@ucsd.edu

I've heard complaints about Kenwood service. None the less, the TH-78 looks like a very interesting feature-rich unit. Other Kenwood HTs I've used have had excellent receive sensitivity. Kenwood HTs often have a bassy somewhat muffled transmit audio characteristic. I have not used the TH-78.

I have used the Yaesu FT-530. The unit has moderate to severe problems with spurious receive and and intermodulation. Some units appear to have leakage of audio between the two receive decks. All the problems above have apparently been acknowledged by Yaesu. The recieve sensitivity is excellent, transmit audio is very clear and the ergonomics of design are close to the best of any HT. I'd consider the FT-470 as a possible second choice if not all the Buck Rogers features of the 530 are required. Recieve can be expanded to cover up to 870-900 MHz. Transmit can be expanded to cover some GMRS frequency ranges, but I do not recommend doing so.

I own a IC-W2A. It is a very rugged radio. It has true dual receive, but not dual in-band receive as do the two units above. The CTCSS decode board is an option on the IC-W2A. Also, Icom accessories tend to be more expensive than Kenwood and Yaesu. The keyboard of the W2 is pretty crowded, but functional. Transmit audio is excellent. Recieve audio is passable; that is my biggest dislike of the W2 - the speaker looks more like an earphone element than a speaker. At full volume, the W2 can be difficult to hear in a noisy envioronment. I previously had an IC-24AT which had considerably healthier audio. As is the case for all members of the newer Icom family, the battery clip is somewhat flimsy -- I haven't broken the clip off a pack yet, but I know several people who have -- I do keep my HT in a carry bag. I try to avoid rough handling. The W2 can be expanded for GMRS receive with reduced sensitivity and GMRS transmit.

The Alinco DJ-580 is certainly a cost/feature leader. It seems to be a love it or hate it thing. I know several people who have DJ-580s and like them. The 580 can be expanded for aircraft and GMRS receive.

Additional units to consider are standard C528A and C558A. Standard units have excellent receive sensitivity. Standard HTs may have their programming settings cloned from a previously programmed unit over the air by exchanging a DTMF sequence between the HTs. Receive may be expanded. Additionally, a stock unit may be cloned from an expanded unit to enable expanded operation without physically modifying the cloned unit.

- -

Bill Mayhew NEOUCOM Computer Services Department Rootstown, OH 44272-9995 USA phone: 216-325-2511 wtm@uhura.neoucom.edu (140.220.1.1) 146.580: N8WED

Date: Sat, 6 Feb 1993 13:07:29 GMT

From: pa.dec.com!engage.pko.dec.com!nntpd.lkg.dec.com!nntpd2.cxo.dec.com!

nuts2u.enet.dec.com!little@decwrl.dec.com

Subject: Proposition To: info-hams@ucsd.edu

v111qheg@ubvmsd.cc.buffalo.edu (P.VASILION) writes:

>Summary: General, Advanced and Extra Licensees are not affected. The Tech.
>license becomes the initial class of license. The Novice becomes the
>second step in the license ladder. Current question pools are revamped to
>reflect the change of licensing. A new exam element, 2b, is created and thus
>a new question pool for this license. Element 2 and 3a are needed to pass
>the Technician. These elements have had HF-related questions removed. The
>VEC's would be given the authority to issue STA's for current Techs with code
>to continue to operate on HF while they pass the new Novice exam and while

You got part of the argument right, i.e. changing the written exams so the question pools reflect the operating privileges granted. That makes _great_ sense!

Why not continue and make the Morse code exams also reflect the operating privileges granted? This is the real heart of the matter.

Your restructuring does very little to change the licensing system and the privileges granted other than make it a hassle for all the existing novice and technicians. Also, no matter how the thing is restructured, the FCC would have to spend very little.

Again, the real issue is making the privileges granted by the Morse code exams related to the Morse code exams to the extent allowed by international treaty. Currently to use phone on any band below 10 meters one needs to pass a 13 WPM Morse code test. How does that test relate to those privileges???? If the 13 WPM test simply granted additional CW spectrum, that would be cool. But why is it a gating factor for phone, digital, or other modes?

Somehow though the argument always gets turned into a CW vs digital, or archaic vs efficient, or cost vs simplicity, or hazing vs tradition, or whatever other tangential discussion. (Sounds a lot like Congress :-()

It matters not a hoot whether Morse code is good, bad, or indifferent. Simply make the exams consistent with the privileges granted. That's all most of the proponents of change are asking.

73, Todd N9MWB

Date: Sat, 6 Feb 1993 21:41:52 GMT

From: shade.Princeton.EDU!chinatti@princeton.edu

Subject: question on DPLs To: info-hams@ucsd.edu

Question:

How is a digital private line actually represented? I know that it is a low speed digital word (8 bits I believe) somehow transmitted (?below the audio?) on the carrier, but I was hoping someone could explain exactly how it works. Also, on my Motorola mobile, there is an option for "Inverted DPL" for a squelch code, which I also am curious about. I assume they are basically the same principle, and perhaps once the DPL is explained this will become clearer.

Thanks, Steve

- -

Steve Chinatti, EMTA, EECS student, Princeton University, Princeton, NJ internet:chinatti@phoenix.Princeton.EDU bitnet:chinatti@pucc.bitnet

Date: Fri, 05 Feb 93 19:54:01 GMT

From: valinor.mythical.com!n5ial!jim@uunet.uu.net Subject: Radio Frequency interference and My Cat

To: info-hams@ucsd.edu

[note: insanely long lines split, since most of us don't have several hundred character wide displays like the original poster does.]

In article <johnr.728391933@aix3090b.uky.edu> johnr@aix3090b.uky.edu writes:

- > When I operate my ham radio my cat likes to sit on a nearby bookshelf and
- > listen to all my contacts. Because I don't have the means to put up an
- > external antenna I have a 4 foot mobile antenna which I sit on the same
- > bookshelf and transmit from. For th

first off, you don't mention what you're doing for a counterpoise, but I do hope you have one... if it's a 1/4 wave vertical, it does need something to look like the other 1/4 wave (this is normally done with ground radials, or for mobile antennas, the metal of the car). if not, your antenna may even tune up ok with a transmatch, but the effectiveness of that antenna may be severely compromised.

also, I seriously doubt that your mobile antenna is rated at a full kW. you may find yourself cooking your antenna, and if you're right in the middle of a QSO (thus not checking the SWR before transmitting, since you've already done so), you may find yourself transmitting into a big mis-match, and your finals may eat themselves, too.

- > Since my cat loves to sit on the bookshelf right next to the antenna
- > I was wondering if I should worry about the 1,000 watts that are
- > comming out of the antenna?

tell you what.... why don't you just hold your hand on the antenna while you key down (just lock your cw key down for a sec). I'll wait. did the RF burns hurt bad enough to kill you? hello? hello?.... you still there?

ok, so it isn't really funny. but neither is the issue in question. there are several things you need to worry about. not just for your cat, but for yourself, too! you're talking about a kW here....that's a lot of RF power, and even at HF freqs, that's something to be concerned about.

first, while the jury is still out on the exact dangers of RF radiation, it is pretty much agreed on that there is a big danger. I don't know about the cancer bit, but there is no question that there is a danger in cases of high-intensity exposure.

the first problem is the danger of physical contact with the antenna. ever had RF burns? I can, and I can tell you now that RF burns from even a 100 Watt transmitter hurt like hell. but you're not just talking about a lowly 100 W --- you're talking about a full kW. I've never gotten an RF burn from a kW transmitter, and you can bet I'm going to do *EVERYTHING* I can to make sure I *NEVER* do.

so, what if your cat walks by the antenna, touches it, and gets burned? at a kW, that might just be the end of your cat for good. notice the absolute lack of a smiley here....

now, even if we get past the RF burns problem, there's still the danger of the rather intense RF field you're creating right near both you and your cat.

the following is from {The ARRL Antenna Book} (1991 edition), chapter 1, the section entitled ``RF Radiation Safety'':

Both RF and 60-Hz fields are classified as {nonionizing radiation} because the frequency is too low for there to be enough photon energy to ionize atoms. Still, at sufficiently high power densities, EMR poses certain health hazards. It has been known since the early days of radio that RF energy can cause injuries by heating body tissue. In extreme cases, RF-induced heating can cause blindness, sterility and other serious health problems. These heat-related health hazards may be called {thermal effects}. But now there is mounting evidence that even at energy levels too low to cause body heating, EMR has observable biological effects, some of which may be harmful. These are {athermal effects}.

later on in that section, you'll find ``Table 5: RF Awareness Guidelines'' --- this is one of the items in that section:

* No person should ever be near any transmitting antenna while it is in use. This is especially true for mobile or ground-mounted vertical antennas. Avoid transmitting with more than 25 watts in a VHF mobile installation unless it is possible to first measure the RF fields inside the vehicle. At the 1-kilowatt level, both HF and VHF directional antennas should be at least 35 feet above inhabited areas. Avoid using indoor and attic-mounted antennas if at all possible.

now, after reading all of these things, my guess is that you're probably working on building an invisible dipole or other such outside antenna that you can get away with, right?

if you can't get the antenna well away from yourself, your cat, and other people as well, cut your power back. in fact, go back to using 50 W. remember, the difference between 50 W and a kW is only 13 dB, which amounts to about 2 S-units. is getting an 579 instead of a 559 worth all the risks, not just to your cat, but to yourself as well?

--jim

#include <std_disclaimer.h> 73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W

AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

Date: Fri, 5 Feb 1993 20:16:13 GMT

From: haven.umd.edu!darwin.sura.net!bogus.sura.net!howland.reston.ans.net!usc!

sdd.hp.com!hpscit.sc.hp.com!hplextra!hpl-opus!hpnmdla!alanb@ames.arpa

Subject: RF exposure To: info-hams@ucsd.edu

In rec.radio.amateur.misc, tatsuya@sofya.math.byu.edu writes:

>Recently, once again, I am starting to worry about RF exposure.
>Does anyone tell me how many times more RF expousre I am getting if I use
>rubber duck next to my head compare w/ say, 50W on the top of my roof.

I wouldn't use 50W into a rubber duck next to your head. A couple of watts intermittent use from an HT shouldn't be a problem. Or if it is, an awful lot of hams, public-safety employees and cellular phone users are in trouble!

AL N1AL

Date: Sat, 6 Feb 1993 22:01:47 GMT

From: dog.ee.lbl.gov!overload.lbl.gov!agate!usenet.ins.cwru.edu!magnus.acs.ohio-state.edu!bgsuvax!att!att!dptg!ulysses!ulysses.att.com!wmb@network.UCSD.EDU

Subject: Some FT-530 Questions...

To: info-hams@ucsd.edu

In article <Feb.2.09.58.03.1993.12307@clam.rutgers.edu>, steuer@clam.rutgers.edu
(robert Steuer) writes:

- > 1. When the radio is off and you press the MONITOR button on the side,
- > the clock display changes to minutes and seconds(I just answered my
- > own question!! Happy Happy Joy Joy!)
- > Well now, let me rephrase this when ever the clock display is
- > one one side, and you press the monitor time, it will show the minutes
- > and seconds versus the hours and minutes!

Anyone discover any other undocumented features/behaviors? The only one I've found is that the memories store more than the book says -- in addition to frequencies, repeat/simplex, repeater offset and CTSS tone, they store step size, power level and AM receive on/off.

Now if there were only an easy way to transfer memory contents to a VFO (other than via the CALL channel). One would think that holding F for 1/2 second and then pressing VFO might do it, but it doesn't..

> 3. When searching in the 800Mhz region, is it possible to search in > anything besides 12.5KHz?

It appears to ignore step-size at 800MHz and use 12.5.

Bill Brelsford, K2DI
wmb@joplin.att.com

Date: 6 Feb 93 21:19:49 GMT

From: pa.dec.com!decprl!decprl!boyd@decwrl.dec.com

Subject: USA Reciprocal licensing

To: info-hams@ucsd.edu

I'm going to be in the US in March. I have an Australian AOCP (all bands, all modes) so I'm wondering how fast I can get the FCC to turn my AOCP into the right thing.

Thanks

... de VK2BHR portable Paris, France

End of Info-Hams Digest V93 #181 ************